

Milk Thistle

Silybum marianum

Sunflower Family

Class A Noxious Weed: Eradication Required

Identification Tips

- Tall, robust, branching winter annual/biennial 2 to 6 feet tall
- Spines along the leaf edges and stems
- White marbling patterns on shiny green leaves
- One large, purple flower per stem
- Broad, spiny bracts surround the flower head

Biology

- Flowers from late April to mid-May
- Reproduces by seed; over 6,000 seeds per plant are produced annually
- Seeds fall near the plant and are moved by erosion, animals, rain, and human activity
- Seeds remain viable in the soil for at least 9 years

Impacts

- Poisonous to cattle and sheep
- Renders rangeland and grasslands worthless
- Dense stands impede the movement of wildlife
- When not controlled, can produce 4 tons of green weight per acre pushing out beneficial plants

Distribution

- Limited distribution in King County; most sites are located in rural King County
- Milk thistle may have been imported to the region through contaminated hay; sometimes found in garden and flower seed packets
- Establishes in areas with full sun and disturbed soils such as pastures, roadsides, ditches and edges of cultivated fields

Questions?

King County Noxious Weed Control
Program Line: 206-296-0290
<http://dnr.metrokc.gov/weeds>



Due to its limited distribution in King County and impact to agricultural lands, milk thistle is a Class A weed; removal is required by law.



Milk thistle is identified from other thistles by its distinctive leaves of white marbling patterns.



Mature milk thistle can produce thick stands, reaching 6 feet or higher.

What You Can Do

Native to the Mediterranean, milk thistle is sometimes grown as a medicinal plant. In our region, however, this plant has proven to be invasive and toxic to cattle and sheep. The King County Noxious Weed Control Program is actively trying to eradicate milk thistle from all areas in the county. Do your part by checking for this noxious weed on your property and for seeds on clothing, vehicles and animals when exiting an area known to have milk thistle.



Milk thistle

Control Methods

If you find milk thistle on your property, choose one or a combination of the control methods listed below.

Manual: For small sites with few plants, pull or dig up plants and remove as much root as possible so the plant will not re-sprout. This method can be uncomfortable due to the plants pervasive spines. Wear protective clothing including eye protection. To be fully effective, all mature plants need to be removed so no new seeds are produced. Do not leave flower heads on the ground as the seeds can remain viable.

Mechanical: Mowing is generally not recommended as it may prolong plant survival for another year. For mature plants, clear thick stands or multibranched plants with manually operated tools: chainsaws, brush cutters, axes, machetes or loppers. Cut plants near ground level; take care to avoid spreading mature seeds to un-infested areas. Goats reportedly can graze milk thistle with no ill effects, so it is possible to control small infestations with these animals. But keep other livestock away from milk thistle as it can cause nitrate poisoning.

Chemical: **Follow labels exactly as written and only use products appropriate and legal for the site. Herbicides should only be applied at the rates specified on the label. Be aware there may be additional herbicide restrictions when pastures are used by lactating dairy animals.** Foliar herbicides are most effective if applied to actively growing plants either in the spring or the fall. Control will improve with the addition of a suitable surfactant. Selective broadleaf herbicides with the active ingredient of triclopyr, 2,4-D and metsulfuron work well for lawn or pasture areas as they won't harm grasses. When using this type of herbicide or one with glyphosate (such as

Round-up, which is non-selective and will harm grasses), do not cut down the treated plants until they have died. This can take two weeks or more. Another effective method is to cut the stem and apply concentrated herbicide directly to the freshly cut stem. Chemical control options may differ for private, commercial and government agency users. For questions about herbicide use, contact the King County Noxious Weed Control Program.

Other Thistles

There are several types of thistles in addition to milk thistle. The most common are Canada (Cirsium arvense) and bull (Cirsium vulgare)



Canada thistle

thistle. Due to their widespread distribution, control of these thistles in King County is not required, but it is recommended whenever possible. While all thistles share similarities, only milk thistle has green and white marbled leaves. Both bull thistle and milk thistle have sharp, spiny bracts surrounding the flower head, but those found on bull thistle are smaller and denser.



Bull thistle



King County

Department of Natural Resources and Parks
Water and Land Resources Division
Noxious Weed Control Program
206-296-0290 TTY Relay: 711